

Weapons ban

Dear Sirs:

I am in complete agreement with Lederberg in advocating international control of biological weaponry (*American Scientist* 59:195, March 1971). No stone should be left unturned if there is even the remotest chance it may contribute to bringing about some order and sense to human relations. However, I believe Lederberg has greatly weakened his argument when he supports the administration's proposal for a watered-down international ban on chemical weapons. There is no doubt that herbicides have peaceful uses, but this should not prevent them being banned as weapons. What are the arguments against prohibiting one country from using such weapons on another country?

I would go the Geneva protocol one better and include sanctions against the most destructive of all chemical weapons—the common everyday bomb. It would not be necessary to prohibit the use of bombs in warfare, but merely to control by international sanctions their *indiscriminate* use. Besides killing countless thousands of people, bombs have probably destroyed more agricultural land in Indochina than have herbicides. Thousands of acres of rich delta land are now pocked with deep, water-filled craters suitable only for producing carp.

The current accelerating urbaniza-

tion and uncontrolled human population growth is likewise radically changing the environment, upsetting age-old biological equilibria and imposing on man physical, psychological, and social stresses he is ill-equipped to handle. The influenza virus does not vindictively attack its human host with intent to destroy it. The virus, and many others like it, merely expands its range and increases its population to fill the niches we have so thoughtlessly provided it.

The war against disease has many similarities with the war between men. Both to a large extent are man-made anomalies. The path to survival of the species is not that of the conquering hero. We must learn to live with ourselves and in our environment, not at the expense of the other guy or the other creatures with whom we share this tiny planet.

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Dr. Lederberg replies:

No sane human being could have different feelings about war than those expressed by Nyven Marchette. But if we wait until we learn how to fend war in general before we take steps to control biological weaponry in particular, we are likely to suffer a double measure of both.

As to our "war against disease," I cannot argue with the importance of ecological humility in our approaches to this threat. If man still inhabited a figurative Garden of Eden, his paleolithic culture would be dominated by very different problems from the ones that face us today. However, the "balance of nature" offers no assurance that any particular species will survive, especially not such a frail creature as man, whose defenses are limited to what his wits can create.

On March 30 the Soviet bloc made a new treaty proposal at the Geneva Disarmament Conference. In effect, this closely followed the previous proposals by the British and U.S. delegations for a separate treaty to control biological weapons development, production, and stockpiles. This offers great encouragement that such a treaty can be negotiated and put into effect very soon, perhaps within the year.